

PRODUCT INFORMATION PACKET



Model No: LM80104
Catalog No: LM80104

Fire Pump Motor, 25 & 20 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 & 3000 RPM, 256T Frame, DP



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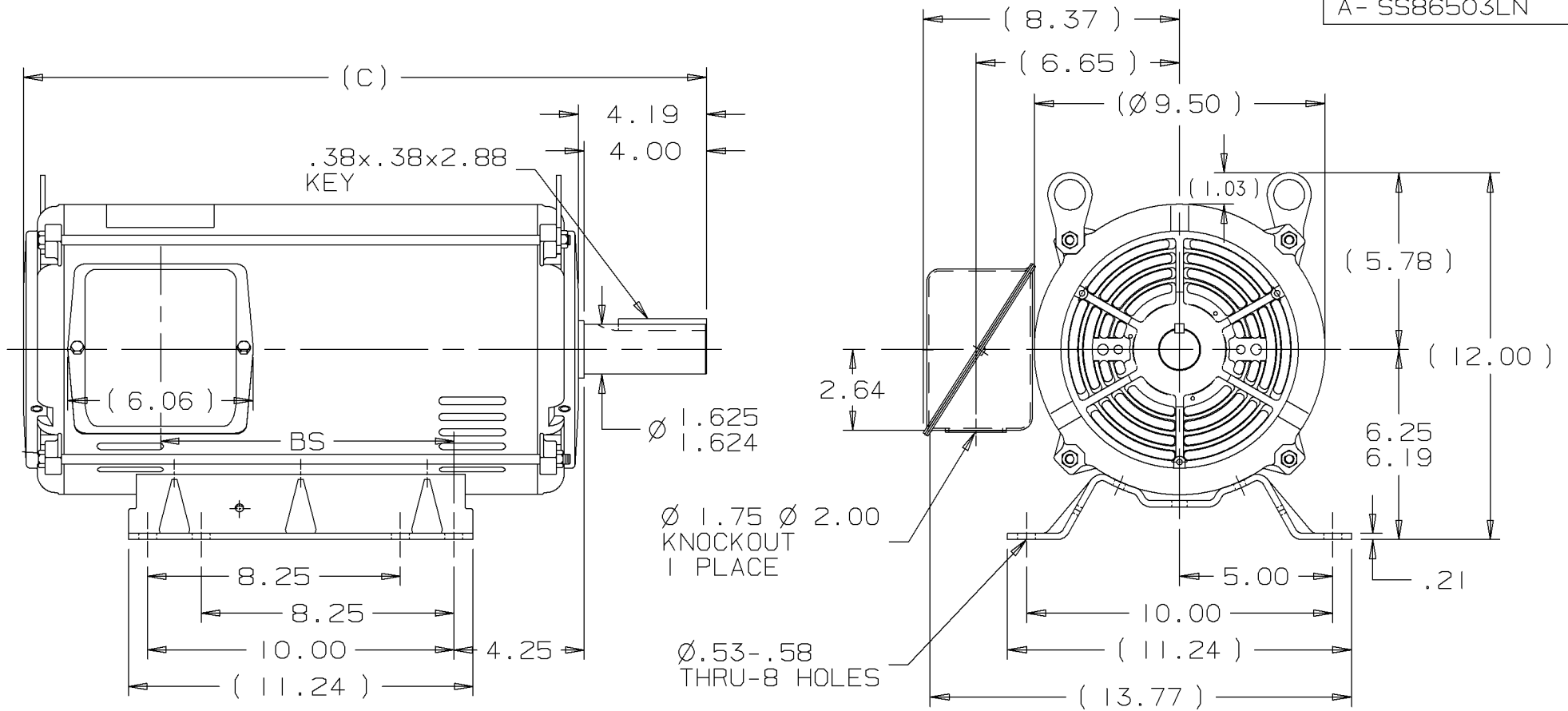


Nameplate Specifications

Phase	3	Output HP	25 & 20 Hp
Output KW	18.7 & 14.9 kW	Voltage	230/460 & 190/380 V
Speed	3520 & 2925 rpm	Service Factor	1.15 & 1.15
Frame	256T	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	91 & 91 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	58/29 & 55/27.5 A	Power Factor	88.3
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	309	Opp Drive End Bearing Size	208
UL	No	CSA	Y
CE	Y	IP Code	12
Number of Speeds	1		

Technical Specifications


Electrical Type	Squirrel Cage Induction Run	Starting Method	Wye Start Delta Run
Poles	2	Rotation	Reversible
Resistance Main	.365 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	T	Overall Length	22.32 in
Frame Length	15.53 in	Shaft Diameter	1.625 in
Shaft Extension	4 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	SS86503LN-1545	Connection Drawing	A-EE7358-LN



DASH	FR.	C	BS	MOUNTING
1370	254T	20.57	7.68	F1 OR F2
1545	254T/256T	22.32	9.43	F1 OR F2

NOTES:

1. NAMEPLATE TO BE READ FROM C'BOX SIDE OF MOTOR.
2. BOX CAN BE MOUNTED IN 90° STEPS.
3. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°. (EXCEPT AS NOTED.)
4. F2 MOUNT -USES 2ND HOLE ON 1370 FRAME.

						UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOL. ON XX±.02 XXX±.005 XXXX±.0005 ANGLES± 7'30"	
2	01-31-2000	UPDATED CONDUIT BOX PER	CN 28427	TJB			MAX. SURFACE ROUGHNESS UNLESS OTHERWISE NOTED
					FINISH		DRAWN BY TRB 07-20-1999
1	07-20-1999	NEW DRAWING		TRB	MATERIAL		CHKD BY ML 07-20-1999
							APPD BY GK 07-20-1999
REV	DATE	CHANGE		NAME	PART NAME OUTLINE 250 FR. - BB - DR.PR.		DRWG NO A-SS86503LN

L PURCHASED

CADD FILE NO.

SS86503LN

ERROR: syntaxerror
OFFENDING COMMAND: --nostringval--

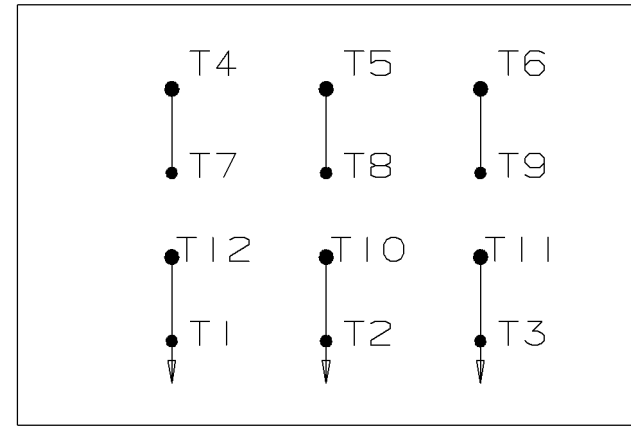
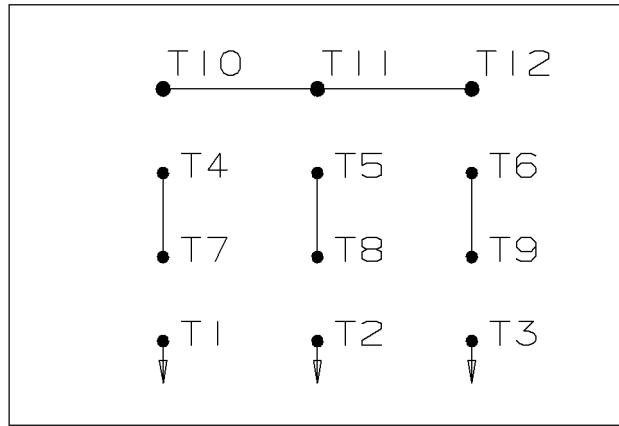
STACK:

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-dictionary-

WYE START

HIGH VOLTAGE

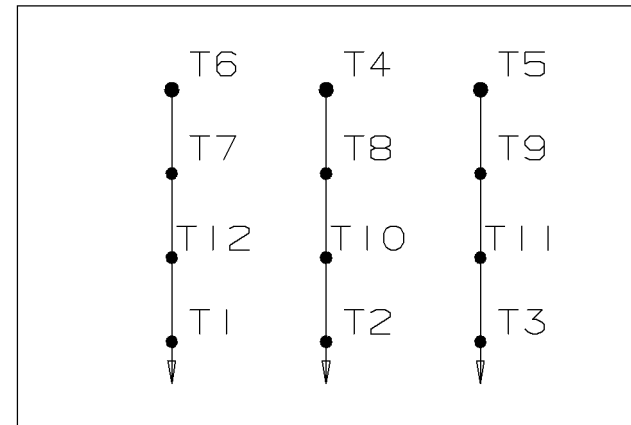
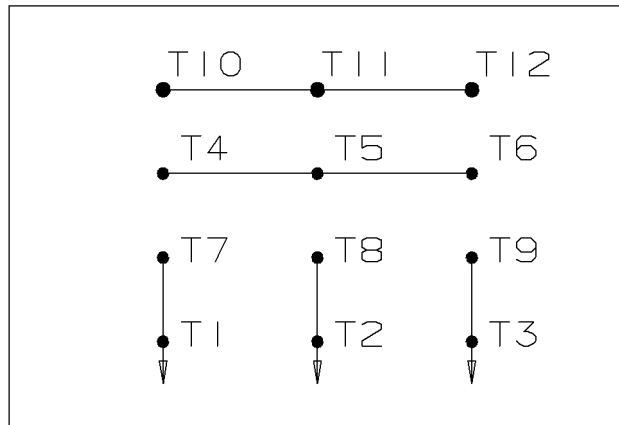
DELTA RUN



WYE START

LOW VOLTAGE

DELTA RUN



4/2 CKTY Δ

					<input checked="" type="checkbox"/> UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOL. ON XX± .02 XXX± .005 XXXX± .0005 ANGLES± 7'30"			
						MAX. SURFACE ROUGHNESS UNLESS OTHERWISE NOTED	DRAWN BY DRS	12-07-1999
				FINISH	CHKD BY ML	12-07-1999		
				MATERIAL	APPD BY TB	12-07-1999		
REV	DATE	CHANGE	NAME	PART NAME CONNECTION DIAGRAM			DRWG NO A- EE7358-LN	
					PURCHASED	CADD FILE NO.	EE7358-LN	



1051 CHEYENNE AVE.
GRAFTON, WI 53024
PH. 262-277-8810

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7358-LN
OUTLINE: A-SS86503LN-1545
WINDING: K2152192

CAT #: LM80104

NONE 6

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
25	18.7	3600	3520	256T	DP	TDX	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	58/29&55/27.5	VVE START DELTA RUN	CONT	F	1.15	40	3300

F.L. EFF	91.0	3/4 LD EFF	92.4	1/2 LD EFF	91.0	GTD EFF	ELECT. TYPE
F.L. PF	88.3	3/4 LD PF	85.0	1/2 LD PF	79.0	89.5	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
37.5 LB-FT	182	72.0 LB-FT 192%	110 LB-FT 293%	55

PRESSURE @ 3	SOUND	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
78 dBA	87 dBA		0.75 LB-FT²	20 LB-FT²	15 SEC.	2	170 LB.

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	NO	NONE	NO	NONE	WATTSAVER

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	ROLLED STEEL
BALL	BALL						
309	208						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.056	0.048	0.206	0.235	7.157	0.150	ODE

* N O T E S *	INVERTER TORQUE: NONE INV. HP SPEED RANGE: NONE					
	ENCODER: NONE NONE NONE					
	BRAKE: NONE NONE NONE					
	FT-LB: NA VOLTAGE: NONE					
	UL: NONE					

DATE: 8/30/2018

BRAKE: NONE
NONE
NONE
FT-LB: NA
VOLTAGE: NONE
HZ:

Data Sheet

Date: 8/30/2018

LM80104



Data @ **460 V**

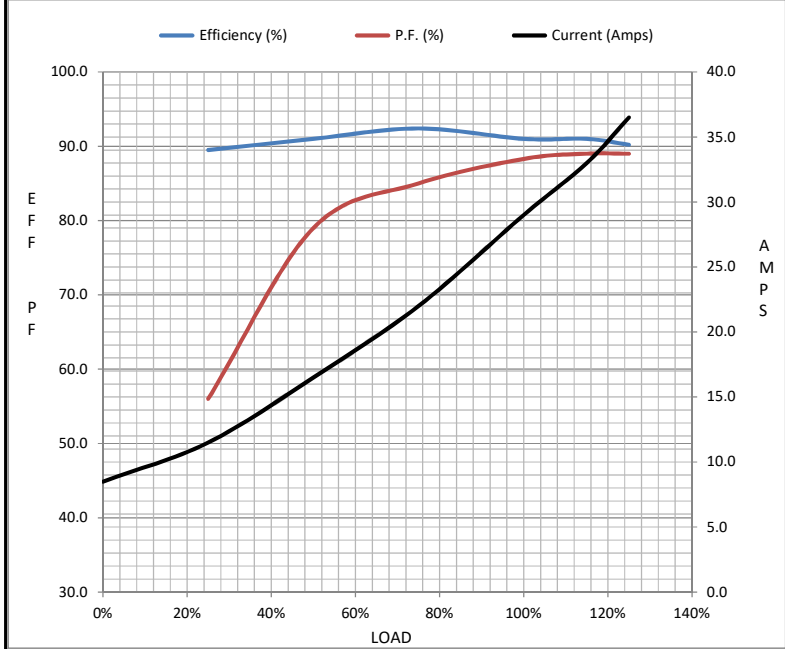
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	8.5	11.5	16.5	22.0	29.0	33.0	36.5	182
Torque (ft-lb)	0.00	9.2	18.5	28.0	37.5	43.0	47.0	72.0
RPM	3600	3580	3565	3545	3520	3,510	3500	0
Efficiency (%)		89.5	91.0	92.4	91.0	91.0	90.2	
P.F. (%)	6.0	56.0	79.0	85.0	88.3	89.0	89.0	41.5

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1500	3100	3520	3600
Current (Amps)	182	165	125	29.0	8.5
Torque (ft-lb)	72.0	65.0	110	37.5	0.00

Information Block				
HP	25.0			
Sync. RPM	3600			
Frame	256			
Enclosure	DP			
Construction	TDX			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	55 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	0.75 Lb-Ft ²			
Ref Wdg	K2152192 NONE			
Sound Pressure @ 1M	78 dBA			
VFD Rating	NONE			
Outline Dwg	A-SS86503LN-1545			
Conn. Diag	A-EE7358-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0560	0.0480	0.2060	0.2350	7.1570



Speed - Torque Curve

